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The regulation of digital trade in the TPP: New trade rules for the digital age

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Chapter 20
The Regulation of Digital Trade in the TPP: Trade Rules for the Digital Age

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Abstract With the rapid development of the internet, electronic commerce is also gaining importance in international trade. However, the rules governing digital trade is still largely lacking. While WTO Members have been discussing the regulation of electronic commerce since the last century, little progress has been made. Instead, most of the progresses are made in various free trade agreements, especially those sponsored by the United States. This article starts with a review of the efforts to regulate e-commerce in the WTO, as well as what the pre-TPP US FTAs have achieved so far, followed by a critical appraisal of the achievements and shortcomings of the e-commerce chapter in the TPP. It is hoped that, by reviewing the evolution of the regulation of e-commerce from the WTO to the TPP, we can learn some lessons on how the rules are being shaped, as well as how it might evolve in the future.

Keywords Electronic commerce · Digital trade · Trade in services
GATS · TPP · WTO · Free trade agreements

In September 2008, the USTR formally announced the launch of US negotiations to join the Trans-Pacific Strategic Economic Partnership, a comprehensive Free Trade Agreement (FTA) concluded by Brunei Darussalam, Chile, New Zealand and Singapore.[1] With the US on board, several other countries also queued up for the agreement, which quickly snowballed from one of the smallest FTAs into the biggest trade deal the world has ever seen.

After seven years of negotiations, in October 2015, the trade ministers of the twelve countries finally announced the successful conclusion of the negotiations for

[1]USTR, United States to Negotiate Participation in Trans-Pacific Strategic Economic Partnership, Sept 2008, available at <https://ustr.gov/archive/assets/World_Regions/Southeast_Asia_Pacific/Trans-Pacific_Partnership_Agreement/Fact_Sheets/asset_upload_file602_15133.pdf>

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the new agreement, which has been renamed as the Trans-Pacific Partnership Agreement.[2] As the first and only trade agreement ever launched and successfully negotiated by the Obama Administration, the TPP provides important insights into the future directions of the US trade policy. This is the case not only for traditional trade issues such as tariff and non-tariff barriers, but also for cutting-egg issues which would make the TPP a truly "21st century" trade agreement.

One prominent example of the new issues is the regulation of digital trade or e-commerce, an issue which the WTO Members have been toying with since the last century but yet to make much progress. In this article, I will start with a review of the efforts to regulate e-commerce in the WTO, as well as what the pre-TPP US FTAs have achieved so far, followed by a critical appraisal of the achievements and shortcomings of the e-commerce chapter in the TPP. It is hoped that, by reviewing the evolution of the regulation of e-commerce from the WTO to the TPP, we can learn some lessons on how the rules are being shaped, as well as how it might evolve in the future.

1 The WTO

1.1 Overview

In the WTO, the first effort to regulate e-commerce was made at the 2nd Ministerial Conference in May 1998, where the Members adopted the Declaration on Global Electronic Commerce. The Declaration recognized the "new opportunities for trade", and directed the General Council to "establish a comprehensive work programme to examine all trade-related issues relating to global electronic commerce, including those issues identified by Members."

In the Declaration, the Members also agreed to "continue their current practice of not imposing customs duties on electronic transmissions". This moratorium on customs cuties has been extended several times, latest in Nairobi until 2017.

At the same time, the moratorium also left a few questions unanswered. First of all, it is unclear as to whether the term "electronic transmissions" refers only to the medium of e-commerce, or to the content of the transmission as well, i.e., the underlying product or service being transmitted. Second, if it refers to the medium of transmission only, does this mean that other digital products which are supplied via traditional medium, such as books, music or videos on CDs could be subject to customs duties? Third, does the prohibition applies only to customs duties, or to other fees or charges imposed on the digital products? Fourth, does the moratorium applies only to imports, or to exports as well?

Pursuant to the Declaration, the General Council adopted the Work Programme on Electronic Commerce in September 1998. Under the Work Program, "electronic

[2]Trans-Pacific Partnership Ministers' Statement, Oct 2015, available at <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2015/october/trans-pacific-partnership-ministers>

commerce" is broadly defined to cover "the production, distribution, marketing, sale or delivery of goods and services by electronic means". Moreover, the Work Program also includes under its scope "issues relating to the development of the infrastructure for electronic commerce."

As e-commerce cuts across many different areas, the Work Program divides up the work among different WTO bodies as follows:

The Council for Trade in Services shall examine the treatment of electronic commerce in the GATS legal framework, which include horizontal issues such as the scope and classification of sectors and access to and use of public telecommunications transport networks and services, the application of both unconditional obligations such as MFN and transparency and conditional obligations like market access, national treatment and domestic regulation, standards, and recognition, as well as measures taken for the protection of privacy and public morals, the prevention of fraud and competition disciplines;
The Council for Trade in Goods shall examine aspects of electronic commerce relevant to the provisions of GATT 1994, the multilateral trade agreements covered under Annex 1A of the WTO Agreement, and the approved work programme, which include not only tariff-related issues such as classification, customs duties and market access, but also non-tariff issues such as rules of origin, customs valuation, import licensing and standards;
The Council for TRIPS shall examine the intellectual property issues arising in connection with electronic commerce, which include issues such as the protection and enforcement of copyright and trademarks, and new technologies and access to technology;
The Committee on Trade and Development shall examine and report on the development implications of electronic commerce, taking into account the economic, financial and development needs of developing countries.

These bodies shall report their progress to the General Council on a regular basis. In addition, the General Council is also responsible for the review of any cross-cutting trade-related and all aspects of the work programme concerning the imposition of customs duties on electronic transmission. In carrying out its work, these bodies shall also take into account the work of other intergovernmental organizations as well as relevant non-governmental organizations.

Since then, the Members have conducted many discussions on e-commerce in the various bodies. However, due to the slow progress in the DDA in general, the Members have not been able to reach any decision on the substantive disciplines on e-commerce notwithstanding the ambitious agenda foreseen in the Work Program.[3]

In the absence of new disciplines, the main obligations on the regulation of e-commerce under the existing WTO legal framework can be found in the GATS

[3]Work Programme on Electronic Commerce Dedicated Discussions Under the Auspices of the General Council Report to the 21 November 2013 meeting of the General Council, WT/GC/W/676, 11 November 2013.

Telecom Annex, which sets out the basic rights of access to and use of public telecommunications transport networks and services by service suppliers, including e-commerce suppliers. Under para 5.a., the general principle is that such service suppliers shall be accorded access to and use of public telecommunications transport networks and services on reasonable and non-discriminatory terms and conditions. This principle is further elaborated in the following sub-paras, which try to strike a delicate balance between the users' rights (para 5 lit. b and c) and the regulators' rights (para 5 lit. E–g).[4]

Beyond the rules in the Telecom Annex, the issues involved in the regulation of e-commerce in the WTO fall into the following three main areas.

The first is the classification issue. As we stated earlier, Internet activities can be classified as goods or services. The distinction is not merely theoretical but has profound practical implications. If they are treated as goods, they could be subject first and foremost to customs duties, as well as MFN, national treatment, and a whole set of non-tariff disciplines such as those on rules of origin, import licensing, customs valuation etc. On the other hand, if they are treated as services, the Members will not be able to regulate them through border measures such as tariffs, but they would have significant leeway in imposing domestic regulations on e-commerce.

While some activities such as the online delivery of books and audio-visual products could arguably be classified as goods according to the technology-neutrality principle, most activities carried through the Internet share more similarities with services trade. For example, many e-commerce activities are intangible and non-storable like services. Similarly, many e-commerce activities are produced with the joint input from both the suppliers and consumers, thus are tailor-made according to the needs of specific consumers like other services.

As it is impossible to provide a comprehensive discussion of both goods and services in such a short paper, we shall mainly focus on the services issues here. Unlike the GATT, which applies a uniform set of rules to most products, the GATS adopts a different regulatory approach. According to the "positive listing" approach, WTO Members only assume obligations for sectors that they have included in their schedule of specific commitments. Thus, we have to further determine which sector or sub-sector e-commerce activities fall under and check the respective schedules to see if it is covered.

Second, even for services covered in its schedule, a WTO Member can choose among different levels of liberalization by inscribing commitments ranging from "none" (which means "no limitation" or "fully liberalized") to "unbound" (which means "no commitment") in the market access and national treatment columns. Thus, we have to determine the appropriate obligations for e-commerce activities.

Third, for legitimate policy reasons, WTO Members might need to deviate from their normal obligations. This is possible under both the GATT and GATS by citing the

[4]Henry Gao, 'Commentary on Telecommunication Services', in Rüdiger Wolfrum and Peter-Tobias Stoll (eds), *Max Planck Commentaries On World Trade Law, Volume VI: "WTO—Trade In Services"*, (Brill (Martinus Nijhoff) Publishers, 2008) paras 41–54.

"General Exceptions" clauses. However, as illustrated by the WTO cases, the preferred exceptions under each agreement have been rather different. Under the GATT, the most commonly cited exceptions are the ones to protect public health and environment. In contrast, the favorite clause under the GATS has been the public morals exception.

Due to its unique nature, e-commerce activities pose special challenges to the GATS regulatory framework on all three issues. In the following sections, I will discuss the regulatory difficulties in each of these areas and, where appropriate, make some policy suggestions on how to address these problems.[5]

1.2 How Should e-commerce Be Classified?

Under the GATS, services are classified according to the Services Sectoral Classification List, which classifies all services into 12 sectors and 160 sub-sectors. While this system does a good job in classifying most other services sectors, it has not been so useful in classifying e-commerce activities. To start with, the Classification List is outdated as it is based on the United Nations Provisional Central Product Classification (CPCprov). The CPCprov was published in 1990, when the Internet was still in its infancy and many e-commerce activities, such as search engines, did not even exist. It doesn't provide direct reference to many e-commerce activities that are common today. Instead, they are often scattered across many sectors. For example, search engine services can arguably be classified under either telecommunication services or computer and related services. Paradoxically, some of the classifications under the Services Sectoral Classification List also overlap with each other. For example, under the List, online info processing and data processing share the same code under CPCprov, but are grouped under telecommunication services and computer services respectively.

To better capture the reality of e-commerce activities, the current classification system needs to be reviewed and revamped in a systematic manner. Depending on the nature of the services, different approaches should be taken. On the one hand, for e-commerce activities which have been supplied through traditional channels before the advent of the Internet, they should be grouped under the original sector as per the technology-neutrality principle, unless of course their nature have been changed by the online delivery. Thus, online banking services shall be classified under banking services, and online universities shall be classified under educational services, etc. On the other hand, the classification of services that only emerged with the birth of Internet is more tricky. As the latest version of the CPC includes many such services, it is tempting to simply replace the reference to the CPCprov codes in the Services Sectoral Classification List with the corresponding codes in

[5]Part of the discussions below are based on Henry Gao, 'Can WTO Law Keep Up with the Internet?' *Proceedings of the 104th Annual Meeting of the American Society of International Law* (American Society of International Law, 2016).

the new version. However, this approach is undesirable for the following reasons. First, as the Services Sectoral Classification List is not mandatory, not every WTO Member uses it or includes explicit reference to the CPC codes in its schedule; Second, even for those that do use the CPC, the schedule cannot be simply updated with the new CPC versions. This is because the CPC often re-shuffles the code numbers around when the versions are updated, thus the same code numbers under different versions might refer to entirely different services. Third, as cases like U.S.-Gambling have shown, it has been a challenge for WTO Members to fully understand even their own commitments. Thus, they will not accept a comprehensive update of the schedules without careful scrutiny.

Because of these difficulties, even just an update of the schedules based on the latest CPC version probably cannot be achieved without major negotiation efforts. In addition, as many e-commerce activities are closely linked together, it is probably better to take a cluster approach in the review and deal with them together.

1.3 Which Obligations Should Apply?

Other than the most-favored-nation (MFN) principle, most obligations under the GATS only applies when a Member schedules relevant commitments. For each sector that a Member includes in its schedule, the Member may choose how much market access or national treatment that it is willing to offer. Moreover, such scheduled commitments are also subject to sector or mode-specific limitations.

For e-commerce activities, such regulatory framework creates the following problems:

First is ambiguity in sectoral coverage. Even though a Member may choose which sectors to include in its schedule, ambiguities could still arise due to imperfections in the classification system. A good example in this regard is the U.S.-Gambling case. In this case, the United States included in its schedule a sub-sector entitled "Other Recreational Services (except sporting)". While the United States argued that "sporting" includes gambling services, the WTO Panel disagreed and ruled that sporting doesn't include gambling services and thus should be included in the U.S. commitments. While this problem could arise in any services sector, e-commerce activities are particularly prone to interpretive ambiguities due to the classification difficulties mentioned earlier.

The second problem is confusion on modes of supply. Under the GATS, services could be supplied in four modes: 1, cross-border supply, 2, consumption abroad, 3, commercial presence, and 4, movement of natural persons. For e-commerce activities, it is quite difficult to tell if a service is supplied through Mode 1 or 2 as the service is provided in the cyberspace. Further complication could arise in cases where the service supplier is located in another WTO Member, but maintains server in the home country of the consumer. It could be argued that Mode 3 shall apply in such cases. As a Member may have different levels of commitments depending on the mode of supply, the confusion over mode of supply could lead to illogical consequences.

To address these problems, the author makes two suggestions. First, the WTO Members should agree on a set of scheduling guidelines for e-commerce activities. This would help clarify the meaning of schedules and avoid future complications. Second is the formulation of a set of regulatory principles that sets a minimum regulatory standard for the e-commerce activities. In this regard, the Telecommunications Reference Paper provides a really good model due to the close links between the two sectors.

1.4 What About the Exception?

The general Exceptions clause allows a WTO Member to deviate from its normal obligations. Under the GATS, the most frequently cited exception is the public morals exception. Interestingly, in both of the two cases concerning Internet services, i.e., the U.S.-Gambling case, an the China-Publications case, the respondent cited the public morals exception to defend their measures. In their rulings, the WTO Panel and Appellate Body often accord wide discretions to the national authorities in defining both the boundaries and depth of the exception, but this could lead to bizarre results. For example, in the China-Publications case, the Appellate Body encouraged the Chinese government to conduct censorship itself as it is supposedly better than outsourcing to private firms from the perspective of WTO law.

In my view, it is problematic to accord wide discretions on the public morals exception to countries without democratically-elected governments as such the governments' views on public morals are not necessarily truly aligned with those of the people. A good way to prevent the potential abuse of the exception is to adopt some universal benchmark on what may qualify as public morals, so that fundamental human rights, such as those enshrined in the Universal Declaration of Human Rights, will not be harmed under the disguise to protect public morals. As the core competence of the WTO is in trade, it is ill-equipped with this task. Instead, we should consider adopting a mechanism similar to the one under the Sanitary and Phytosanitary (SPS) Agreement, i.e., having the standards formulated by another international organization with competence on public morals issue, and making it mandatory for the WTO to consult them when disputes arise.

1.5 Conclusion

In conclusion, while the GATS, in its current form, is not well suited to the regulation of e-commerce, it has the potential to keep up with the regulatory task. However, to make this happen, we will need new approaches in dealing with e-commerce activities, especially on key issues such as classifications, obligations and exceptions.

In this regard, the WTO might wish to learn from the approaches taken in the various FTA, especially the ones negotiated by the US. As the world leader in e-commerce, the US has a keen interest in pioneering the rules of internet regulation and has been the de facto rule-maker in the field. In the next part, we will examine how the US FTAs treat the e-commerce issue.

2 Previous US FTAs

Since its FTA with Jordan in 2000, the US has included e-commerce chapters in every FTA it has signed.[6] These FTAs all follow largely the same model on e-commerce, and the model is even spilled over to some of the FTAs signed by the US FTA partner with other states.[7]

In general, the obligations in these FTAs can be divided into two categories: first, rules converted from existing obligations in the WTO; second, rules beyond the existing WTO obligations.

2.1 Rules Based on Existing WTO Obligations

As e-commerce is a new field, one of the concerns people had was whether the key principles of the WTO would continue to apply to the digital frontier. This issue is addressed in many US FTAs, which states that "[t]he Parties recognize … the applicability of the WTO Agreement to measures affecting electronic commerce." While this language sounds reassuring, several caveats apply here. First, as the language used here is "recognize", one may argue that it does not create binding obligations for FTA Parties to automatically apply all WTO rules to e-commerce. Second, as a matter of fact, it might not be feasible or practical to apply WTO rules automatically to measures affecting e-commerce. As mentioned earlier, the WTO has different rules for goods and services. Given the controversy in the classification of e-commerce, it is hard to apply a set of uniform rules.

To solve this problem, the US FTAs have been taking a pragmatic approach on e-commerce. First of all, they try to avoid the classification issue by declining to state explicitly whether e-commerce should be treated as goods or services. This deliberate ambiguity allows them to pick and choose from both GATT and GATS rules to cover any potential loopholes.

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[6]For a list of the FTAs with e-commerce chapters, see the Annex. Note that e-commerce is addressed in the Jordan FTA not as a chapter but a joint-statement.

[7]For an overview of the e-commerce chapters in pre-TPP US FTAs, see Sacha Wunsch-Vincent and Arno Hold, 'Towards Coherent Rules for Digital Trade: Building on Efforts in Multilateral versus Preferential Trade Negotiations', in Mira Burri and Thomas Cottier (eds) *Trade Governance in the Digital Age: World Trade Forum* (Cambridge University Press, 2012) 193.

For example, if e-commerce is classified as goods, it could be subject to customs duties. The US FTAs address this issue by affirming the moratorium on customs duties established in the WTO Declaration on Global Electronic Commerce. Moreover, these FTAs go a step further by filling in the gaps in the WTO rule. For example, Article 16.3 of the US-Australia FTA states that "[n]either Party may impose customs duties, fees, or other charges on or in connection with the importation or exportation of digital products, regardless of whether they are fixed on a carrier medium or transmitted electronically." This addresses the open questions left by the WTO E-commerce Declaration by making it clear that, first, the prohibition applies to other fees and charges in addition to customs duties; second, it applies to both imports and exports; and third, it applies to the digital product itself regardless of whether it is carried on a traditional medium or through electronic transmission. At the same time, recognizing the need for some countries to collect customs duties on the carrier medium itself, the FTAs with Singapore and Peru also explicitly state that "the customs value of an imported carrier medium bearing a digital product" shall be determined "according to the cost or value of the carrier medium alone, without regard to the cost or value of the digital product stored on the carrier medium". This approach has the advantage of lowering the tariff burden of the higher-valued digital products or services, thus helping to facilitate e-commerce in general.

On the other hand, for those e-commerce activities which could be classified as trade in services, the US FTAs also affirms the application of the relevant disciplines to "supply of a service delivered or performed electronically" by stating that the obligations contained in the relevant FTA chapters (such as those on cross-border trade in services, investment and financial services) would be applicable, to the extent that such obligations are not modified by any exceptions or non-conforming measures enumerated in the FTAs.

After confirming the application of the WTO rules in general, the FTAs go on to incorporate several specific principles of the WTO. Of course, these rules have also been modified as necessary to fit the unique nature of e-commerce.

The first is the non-discrimination principle. As one of the most fundamental principles of the multilateral trading system, the non-discrimination principle plays a key role in the WTO legal framework. The principle is reflected in two rules, i.e., the most-favored-nation rule, which prohibits discrimination among imported products; and the national treatment rule, which prohibits discrimination against imported products in favor of national products. All of the US FTAs incorporate the non-discrimination principle. In many FTAs such as the Singapore and Korea FTAs, it is combined with the moratorium on customs duty. In the Australia and Chile FTAs, it is contained in a separate article.

Again, the principle has been tweaked here by mixing the approaches taken under the GATT and GATS. First, both national treatment and most-favored nation (MFN) treatment obligations are included. Second, both obligations apply on an unconditional basis. This is more in line with the GATT approach and different from the GATS approach, where a Member does not assume national treatment obligation for a sector unless specific commitments has been scheduled. Third, the

FTAs also provide that the two obligations doesn't apply to non-conforming measures adopted or maintained under the chapters on services and investment, services subsidies, or services supplied in the exercise of governmental authority. This feature is also modelled after the GATS, which allows Members to schedule exemptions from MFN as well as national treatment obligations. Fourth, the FTAs not only prohibit discrimination on the basis that "the digital products receiving less favorable treatment are created, produced, published, stored, transmitted, contracted for, commissioned, or first made available on commercial terms in the territory of the other Party", but also in cases where "the author, performer, producer, developer, distributor, or owner of such digital products is a person of the other Party". In other words, the non-discrimination treatment applies not only to foreign products as in the GATT, but also to foreign producers as in the GATS. Moreover, the Australia and Singapore FTAs go a step further than even the GATS by prohibiting discriminations against products or producers who are from non-parties.

The second is the transparency principle, which is contained in both Article X of the GATT and Article III of the GATS. The US FTAs with several Latin American and Middle-Eastern countries, for example, explicitly provides that the Parties "shall publish or otherwise make publicly available its laws, regulations, and other measures of general application that pertain to electronic commerce".[8] This provision probably results from the concern by the US in the lacking of transparency in the general administrative and legal framework in these countries.

In addition to the application of general principles in the GATT and GATS, the US FTAs have also incorporated the principles from the sector-specific agreements and the latest WTO Agreements. The example for the former scenario is the provision on access to and use of internet for e-commerce, which states that:

"To support the development and growth of electronic commerce, each Party recognizes that consumers in its territory should be able to:

(a) access and use services and digital products of their choice, unless prohibited by the Party's law;
(b) run applications and services of their choice, subject to the needs of law Enforcement;
(c) connect their choice of devices to the Internet, provided that such devices do not harm the network and are not prohibited by the Party's law; and
(d) have the benefit of competition among network providers, application and service providers, and content providers."

In a way, this provision is inspired by the existing disciplines under the Annex on Telecommunications and Reference Paper, especially the provisions on access to and use of public telecommunications transport networks and services and competitive safeguards. Of course, the principles here are also modified to take into account the different nature of e-commerce, and the coverage is expanded to include not only the hardware infrastructure of the Internet but also the software

[8]See e.g., Article 15.4 of the Colombia FTA.

environment. As the result, the benefit has been extended to not only the network providers but also the application providers, service providers and content providers.

For the latter, a good example is the provision on paperless trading, which can be found in the e-commerce chapters of almost all US FTAs. This article usually includes two sub-sections. One states that the Parties "shall endeavor to accept trade administration documents submitted electronically as the legal equivalent of the paper version of those documents". This is apparently modelled after Article 2.1 of the Trade Facilitation Agreement (TFA), which states that "[e]ach Member shall, where appropriate, endeavour to accept paper or electronic copies of supporting documents required for import, export, or transit formalities." We can see that the US FTA improves upon the TFA provision by first, setting a preference for electronic submission, and second, recognizing the electronic versions as legally equivalent to the paper versions. Under the other sub-section, each Party "shall endeavor to make trade administration documents available to the public in electronic form". Again, this can find its origin in Article 1.1 of the TFA, which requires WTO Members to review their formalities and documentation requirements in light of the technological developments and ensure they are "adopted and/or applied in a manner that aims at reducing the time and cost of compliance for traders and operators".

Yet another interesting feature of the US FTAs is the confirmation and application of some of the hidden principles under the WTO framework. One such example is the technology-neutrality principle, which holds that a service may be applied through any means/technology available unless otherwise specified in a Member's Schedule. This principle has been recognized by the Council for Trade in Services in its Progress Report to the General Council on the work programme on electronic commerce,[9] and confirmed by the Panels in the U.S.-Gambling and China-Publications and Audiovisual Products cases. However, this principle has not been formally incorporated into the WTO agreements. Nonetheless, the US FTAs have been applying the principle by explicitly noting the following in the definition clauses:

carrier medium means any physical object capable of storing a digital product, by any method now known or later developed, … including an optical medium, floppy disk, and magnetic tape;
digital products means the digitally encoded form of computer programs, text, video, images, sound recordings, and other products, regardless of whether they are fixed on a carrier medium or transmitted electronically;…
electronic transmission or transmitted electronically means the transfer of digital products using any electromagnetic or photonic means.

Given the rapid development in the e-commerce sector, it is reassuring to have the application of tech-neutrality principle spelled out so clearly and comprehensively.

[9]S/L/74, 27 July 1999.

2.2 WTO-Plus Obligations

In addition to incorporating the existing obligations in the WTO agreements, the US FTAs have also included provisions on new issues, many of which dealing with non-trade concerns. Some of these provisions can find their origins from the general exceptions clauses in the WTO agreements, while the others are drawn entirely from the non-WTO agreements.

A good example in the first category is clause for online consumer protection, which states that "[t]he Parties recognize the importance of maintaining and adopting transparent and effective measures to protect consumers from fraudulent and deceptive commercial practices when they engage in electronic commerce.[10]" This mirrors the language under Article XX.(d) of the GATT and Article XIV.(c).(i) of the GATS, which allows members to maintain measures necessary to secure compliance with laws or regulation for "prevention of deceptive and fraudulent practices". Given the anonymous nature of cyberspace, most e-commerce transactions are conducted without physical contact between the parties. Thus, it is necessary to have in place measures to protect consumers from fraudulent and deceptive commercial practices.

Another example is the clause on Cross Border Information Flows, which states that the Parties "shall endeavor to refrain from imposing or maintaining unnecessary barriers to electronic information flows across borders".[11] One may argue that the clause is encompassed by the prohibition of "disguised restriction on international trade" under the GATT and GATS exceptions clauses, but again it comes with a different twist here. First of all, the language "electronic information flows across borders" is broad enough to cover even non-trade related information flows. Second, as the clause only applies to "cross-border" barriers, one may argue that domestic restrictions on data flows could be allowed. However, given the wide-spread use of offshore servers and border-less nature of the cyberspace, even domestic regulations could potentially have cross-border implications. Third, the clause also leaves some flexibility to regulators by implicitly allowing "necessary" barriers to cross-border, but the question of whether the necessity requirement is a subjective or objective one is left open. In any event, as this provision is couched in best-endeavor language, it might not have major implications for the FTA Parties.

On the other hand, the provisions on electronic authentication and electronic signatures are entirely new in the world of trade agreements. These provisions require the FTA Parties to leave it to the parties to an electronic transaction to mutually determine the appropriate authentication methods for the transaction, or at least be given the opportunity to prove in court that their electronic transaction complies with any legal requirements with respect to authentication. They solve a big problem in e-commerce, which due to its very nature often have difficulty meeting the requirements under traditional contract laws. As these issues deal mainly with the contracts between private parties, the WTO has never ventured into these areas.

[10]KORUS, Article 15.5.

[11]KORUS, Article 15.8.

Instead, the FTAs draw their inspiration from the UNCITRAL Model Law on Electronic Commerce[12] (1996) and Model Law on Electronic Signatures (2001).[13] Given the widespread adoption of the two Model Laws by the major economies in the world,[14] the US FTAs set good examples by including a clause on electronic authentication and electronic signatures. In the long run, these clauses could help pave the way for the harmonization of international rules on these issues.

3 The TPP

Since the beginning of the negotiations, the TPP has been touted as a "high-standard", "21st Century" trade agreement. As such, it is no surprise that e-commerce features prominently in its agenda. In the Nov 2011 Outline for the TPP, the TPP Members agreed that the e-commerce text shall "enhance the viability of the digital economy". To achieve this goal, the Members resolved to ensure that "impediments to both consumer and businesses embracing this medium of trade are addressed".

In June 2014, the USTR further elaborated the U.S. objectives in the TPP, including the following on e-commerce and telecom:

- "commitments not to impose customs duties on digital products (e.g., software, music, video, e-books);
- non-discriminatory treatment of digital products transmitted electronically and guarantees that these products will not face government-sanctioned discrimination based on the nationality or territory in which the product is produced;
- requirements that support a single, global Internet, including ensuring cross-border data flows, consistent with governments' legitimate interest in regulating for purposes of privacy protection;
- rules against localization requirements that force businesses to place computer infrastructure in each market in which they seek to operate;
- commitments to provide reasonable network access for telecommunications suppliers through interconnection and access to physical facilities;
- provisions promoting choice of technology and competitive alternatives to address the high cost of international mobile roaming".

In the final Agreement, the TPP devoted an entire chapter to e-commerce. In contrast, many contemporary FTAs concluded by other WTO Members, especially developing countries, either fail to address e-commerce issues at all or simply mention the issue in one or two articles. One may argue that such approach simply

[12]Articles 5–8, 11.

[13]Articles 3 & 6.

[14]The Model Law on Electronic Commerce has been adopted by 66 States including the US while the Model Law on Electronic Signatures has been adopted by 32 states.

follows the established practice of the US, which has included e-commerce chapters in every FTA it has concluded in the new century. However, if we take a closer look, we can see that the e-commerce chapter in the TPP exceeds the preceding FTAs in both breadth and depth. For example, the most comprehensive e-commerce chapter before the TPP was contained in the US-Korea FTA. It includes 9 articles and covers the following issues: electronic supply of services, digital products (which include moratorium on customs duties and non-discriminatory treatments), electronic authentication and electronic signatures, online consumer protection, paperless trading, access to and use of internet for e-commerce, and cross-border information flows. In contrast, the TPP includes a total of 18 articles and address additional issues such as domestic electronic transactions framework, personal information protection, Internet interconnection charge sharing, localisation of computing facilities, unsolicited commercial electronic messages, cooperation, source code and dispute settlement. In summary, while the TPP e-commerce text includes the key elements of the traditional US template, it also includes new features which reflect new directions in the US policy. On the other hand, as the TPP is a regional initiative that involve more parties than the traditional bilateral US FTAs, the US also have to make compromises in the TPP in response to the bargaining pressures from the other parties. As the result, while the TPP e-commerce chapter was able to make progress on some new issues, it has retracted from the earlier US FTAs on some other issues.

3.1 New Progresses Made

While many of the issues addressed in the TPP are new to the multilateral trading system, the regulatory approach still largely follows the traditional WTO model by focusing on the regulators. At the same time, the TPP has also taken note of the problems created by the unique nature of Digital Trade and formulated rules accordingly.

Many of these are couched in the "thou shalt not" language familiar to trade lawyers. For example, under Article 14.13, TPP Members shall not require a covered person to use or locate computing facilities such as servers and storage facilities in the host country's territory as a condition for conducting business in that territory. In a way, this provision resembles the prohibition of local content requirements found under the TRIMs agreement.

Similarly, under Article 14.17, a TPP Member may not require the transfer of, or access to, source code of software owned by a person of another Party, as a condition for the import, distribution, sale or use of such software, or of products containing such software, in its territory. But the prohibition applies only to mass-market software or products containing such software, which implies that softwares tailor-made for specific clients/projects are excluded. The same article further excludes software used for critical infrastructure and those in commercially negotiated contracts, and allows Parties to require the modification of source code

to ensure compliance with its FTA-consistent laws or regulations, and the provision of source code for patent applications.

Some other articles take a step further by requiring the TPP parties to make positive efforts and put in place certain laws and regulations. For example, in addition to the provision on the recognition of validity of electronic authentication methods and electronic signatures, TPP Members are also required to maintain a legal framework governing electronic transactions consistent with the principles of the UNCITRAL Model Law on Electronic Commerce (1996) or the United Nations Convention on the Use of Electronic Communications in International Contracts (2005).[15] Another two articles require the Parties to adopt or maintain the necessary legal framework for online consumer protection and personal information protection respectively.[16]

In contrast, with respect to some of the other issues, the TPP takes an entirely new approach by shifting the regulatory focus to business firms. The most obvious example is the provision on unsolicited commercial electronic messages, which requires the suppliers of such information to either obtain the consent from the recipient, or at least allow the recipient to choose not to receive such information. If the suppliers fail to comply, the recipient shall have recourse again them. Similarly, the burden of meeting the requirements for personal information protection also rests largely with private firms. Indeed, the TPP explicitly allows the Members to meet the obligation for personal information protection by not having mandatory laws on the substantive obligations, but just relying on the enforcement of voluntary undertakings by enterprises relating to privacy.

Another two new provisions under the TPP deal with cyber-security cooperation and internet connection charge sharing. However, as they use best-endeavor languages, they might have only limited impacts.

3.2 Where the TPP is Falling Short

First, the overall scope of the TPP is narrower. The narrower scope is mainly defined by limiting the type of actors that conduct the activity or hold or process the information. For example, under Article 14.2, the TPP has explicitly carved out government procurement and information held or processed by or on behalf of a Party, or measures related to such information, including measures related to its collection. With this carve-out, the TPP countries could require that government data be stored and processed only on domestic computing facilities, or require suppliers in government procurement projects to transfer the source code to the government. One might think that this carve-out mainly respond to concerns from the lesser developed TPP countries, but as the Edward Snowden Affair has illustrated, even a most

[15]Article 14.5.

[16]Article 14.7 & 14.8.

advanced and open economy like the US might share the reluctance to subject its government to the highly demanding requirements under the TPP. Similarly, Article 14.1 excludes "financial institution" and "cross-border financial service supplier of a Party" from the scope of "covered person" under the e-commerce chapter. This probably reflects the consensus among the TPP Members to strengthen the regulation of financial sector in the wake of the 2008 Financial Crisis.

Second, the scope of the non-discrimination obligation has shrunk as well. To start with, all previous FTAs covers digital products which "are created, produced, published, stored, transmitted, contracted for, commissioned, or first made available on commercial terms" in another FTA party. The TPP, however, removes "stored" from the list and denies non-discrimination to non-TPP originating digital products that are stored in servers in TPP countries. Similarly, by removing the category "distributor" from the previous FTA list of "the author, performer, producer, developer, or distributor of such digital products is a person of the other Party", the TPP essentially allows Members to deny non-discriminatory treatment to popular app distributors such as Google Play store and Apple App store, both of which sell many apps developed by non-TPP nationals. Also, while some earlier FTAs such as the ones with Australia and Singapore extend the non-discrimination benefits to digital products from non-FTA parties, the most recent Korea FTA has retracted by reserving the benefits only to FTA parties. This less-liberal approach is followed by the TPP. To sum up, under the TPP, the benefit of non-discrimination seems to be reserved only for those with direct roles to play in shaping the content of the products, rather than just provide storage or distribution services for the product.

Third, with regard to the provision on cross-border information flow, while the TPP has strengthened the obligation by changing the language from the best endeavor language in the KORUS FTA to a legally binding "shall", it has also taken a backward step by limiting the scope from all information to only such information transfer that is "for the conduct of the business of a covered person". This limitation is reportedly added to address concerns by countries like Australia and New Zealand,[17] but it could raise several problems. First, as the definition of covered person only includes covered investment, investor or service supplier, other parties can not benefit from this provision. In other words, if a Member choose not to open up a sector to other TPP Parties, it can restrict information flow in the sector. Second, even for covered persons, they can only claim the benefit for those activities "for the conduct of the business". If interpreted narrowly, one can argue that even pre-sale promotional activities might not be covered here. Third, as the word used here is "for the conduct of the business", it could be argued that only for-profit activities count as "business" activities and not-for-profit activities such as free search engine service, free social media and free news service etc. are not covered as they do not qualify as proper "business". Thus, the blocking of Google, Facebook and open-access newspapers by certain countries might be perfectly legal under this provision.

[17]TPP Countries to Discuss Australian Alternative to Data-Flow Proposal, Inside US Trade (2012).

4 Concluding Thoughts

As we can see from our earlier discussions, while the TPP is not the first US FTA to include an e-commerce chapter, it has many interesting features, and they reflect the major shift in both regulatory philosophy and approach in the new era of US FTAs.

In terms of the overall regulatory philosophy, the earlier US FTAs tend to focus mostly on the "trade" aspects by trying to fit e-commerce into the existing framework of the WTO and borrowing heavily from the WTO rulebooks, while the TPP has started to recognize the unique nature of e-commerce and tried to formulate new rules befitting the "digital" nature of e-commerce. Such efforts are most evident in rules relating to issues such as transfer of source code and forced localization requirements, which are new issues created by the amorphous and border-less nature of digital trade.

Of course, it would be unfair to say that the earlier FTAs have made no headway into the "digital" regulation aspects. For example, by explicitly stating that digital products encompass both goods and services, the earlier US FTAs avoid the trap set by the compartmentalization between the GATT and the GATS and made a small but important step into the formulation of a coherent approach on digital trade.

Nonetheless, due to their inherent myopia on the nature of digital trade, the earlier US FTAs just blindly followed the regulatory approach under the WTO by focusing on the regulation of national governments, even though, ironically, one might argue that digital trade was able to develop so quickly largely because there was little or no governmental regulation. Perhaps in recognition of this, the TPP has taken a different approach by shifting the regulatory burden to private firms, as they are the really the ones who have created the digital frontier. With the massive information they have in control, private firms such as Google and Facebook are more powerful than most governments and the TPP has done the right thing by including them in the regulatory matrix.

As the first-ever FTA negotiated by the Obama Administration, the TPP reflects the new priorities and approaches taken in US trade negotiations for future FTAs, as well as other negotiating fora. For example, those who are familiar with the negotiations under the Trade in Services Agreement (TiSA) can find many similarities between the TPP provisions and the US proposals on e-commerce in the TiSA. At the same time, given the large and diverse membership of the TPP, the US did not always get what it wanted but occasionally had to settle with compromises in the TPP. In other words, the TPP tells us not only what the US wants, but also what the US is likely to get in a pluri-lateral or even multilateral deal under the bargaining pressures from the other parties. Thus, understanding the e-commerce chapter in the TPP is important not only for the current TPP Members, but also for the other countries, as they will very likely have to face similar rules under the TiSA or even the WTO one day.

Annex: List of Pre-TPP US FTAs with E-commerce Chapters

- Australia: Australia—United States Free Trade Agreement (2004)
- Chile: Chile—United States Free Trade Agreement (2004)
- Singapore: Singapore—United States Free Trade Agreement (2004)
- Bahrain: Bahrain—United States Free Trade Agreement (2006)
- Morocco: Morocco—United States Free Trade Agreement (2006)
- Oman: Oman—United States Free Trade Agreement (2006)
- Peru: Peru—United States Trade Promotion Agreement (2007)
- Dominican Republic—Central America FTA (2005)
- Panama: Panama—United States Trade Promotion Agreement (2012)
- Colombia: United States—Colombia Free Trade Agreement (2012)
- South Korea: United States—Republic of Korea Free Trade Agreement (2012)